DATE: 01/09/2002

PCT10

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     3 <110> APPLICANT: Morell, Matthew
             Li, Zhongyi
     5
             Rahman, Sadequr
             Appels, Rudolph
     8 <120> TITLE OF INVENTION: Genes Encoding Wheat Starch Synthases and Uses Therefor
    10 <130> FILE REFERENCE: 127-01
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/018,418
    13 <141> CURRENT FILING DATE: 2001-10-29
    15 <150> PRIOR APPLICATION NUMBER: PCT AU00/00385
    16 <151> PRIOR FILING DATE: 2000-04-28
                                                               ENTERED
    18 <150> PRIOR APPLICATION NUMBER: AU PQ0052/99
    19 <151> PRIOR FILING DATE: 1999-04-29
    21 <160> NUMBER OF SEQ ID NOS: 54
    23 <170> SOFTWARE: PatentIn Ver. 2.0
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	-				-	tcc				-	_	-	-		_	-	802
93	ASP	195	нта	PIO	GIU	Ser		vaı	PIO	Ата	GIU	<u>гу</u> ѕ	Ата	PIO	PIO	ser	
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						gtg			_								850
	210	СТУ	ser	ASII	Pile	Val 215	PIO	ser	Ата	ser	220	PIO	GTÀ	ser	ASP	225	
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100		. ser	ASP	val	. G1u 230		GIU	Leu	гу	ьуs 235	_	Ald	val	тте		Lys	
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Input Set : A:\127-01.app

Output Set: N:\CRF3\01082002\J018418.raw

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Input Set : $A:\127-01.app$

Output Set: N:\CRF3\01082002\J018418.raw

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227	tgg	acg	ttc	gac	cgc	gca Ala	gag	gcg Ala	cag Gln	aag Lvs	ctg	atc Tle	gag Glu	gcg Ala	ctc Leu	ggg Glv	2434
229	_		740					745					750				
231	cac	tgc	ctc	cgc	acc	tac	cgg	gac Asp	tac	aag Lvs	gag	agc Ser	tgg Trp	agg Arg	ggg Glv	ctc	2482
233		755					760					765					
235	cag	gag	cgc	ggc	atg	tcg	cag	gac	ttc	agc	tgg	gag	cat	gcc	gcc	aag	2530
	770	GLu	Arg	GIY	мет	775	GIII	Asp	Pne	ser	780	GIU.	птэ	АТа	АІа	785	
239	ctc	tac	gag	gac	gtc	ctc	gtc	aag	gcc	aag	tac	cag	tgg	tgaa	acgct	cag	2579
240 241	Leu	Tyr	Glu	Asp	790	Leu	Val	Lys	Ala	Lуs 795	Tyr	GIN	Trp	•			
243	ctg	ctago	ccg (gtcca	agcc	cc go	catgo	cgtgo	ate	gaca	ggat	gga	attgo	ege a	attg	cgcacg	2639
245	cag	gaag	gtg (ccate	ggag	eg e	egge	ateco	g ega	agta	acag	tgad	catga	agg 1	tgtg:	tgtggt gctcct	2699
247	tat:	tacao	aut a	atato	gaaa	at of	tati	taaci	t tg	gtati	tqta	att	tgtta	atg 1	ttgt	gtgcat	2819
251	tat	tacad	gag d	ggcaa	acgai	to to	gege	egge	g cad	ccgg	ccca	act	gttg	ggc (cggt	cgcaca	2879
						eg e	ctgg	gccg1	t tg	gatco	ccac	cgaa	aaaa	aaa a	aaaa	aaaaa	2939
		0> SI															
		1> LI			98												
		2> T			m-si-	t i aur		a+i 171	1770								
		3> 01 0> S1				LICUI	ıı ae.	stiv	A111								
262	Met.	Ser	Ser	Ala	Val	Ala	Ser	Ala	Ala	Ser	Phe	Leu	Ala	Leu	Ala	Ser	
263	1				5					10					15		
	Ala	Ser	Pro		Arg	Ser	Arg	Arg		Thr	Arg	Val	Ser	Ala 30	Ser	Pro	
266 268	Pro	His	Thr	20 Glv	Ala	Glv	Ara	Leu	25 His	Trp	Pro	Pro	Ser		Pro	Gln	
269			35	1		_	,	40		-			45				

Input Set : A:\127-01.app

Output Set: N:\CRF3\01082002\J018418.raw

						•										
271 272	Arg	Thr 50	Ala	Arg	Asp	Gly	Ala 55	Val	Ala	Ala	Arg	Ala 60	Ala	Gly	Lys	Lys
2/2	•	710	C1	т10	7 an	7 cn		Ala	Dro	Δla	Δra		Pro	Arσ	Ala	Leu
		Ата	СТУ	116	АЗР	70	AIU	AIG	110	1114	75	0111		5		80
275	65	a 1	01		33-		T	370 l	7 l a	Clu		λκα	λen	Dro	Val	
	Arg	GLY	GTA	Ala		Thr	ьуѕ	Val	Ата		Arg	AIG	АБР	PIO	95	цуз
278					85	_				90	- 1	.		D		710
280	Thr	Leu	Asp		Asp	Ala	Ala	Glu		GLY	Ата	Pro	ser		PLO	Ald
281				100					105					110	_	
283	Pro	Arg	Gln	Glu	Asp	Ala	Arg	Leu	Pro	Ser	Met	Asn		Met	Pro	Val
284			115					120					125			
286	Asn	Gly	Glu	Asn	Lys	Ser	Thr	Gly	Gly	Gly	Gly	Ala	Thr	Lys	Asp	Ser
287		130					135					140				
289	Gly	Leu	Pro	Ala	Pro	Ala	Arg	Ala	Pro	Gln	Pro	Ser	Ser	Gln	Asn	Arg
	145					150					155					160
292	Val	Pro	Val	Asn	Gly	Glu	Asn	Lys	Ala	Asn	Val	Ala	Ser	Pro	Pro	${ t Thr}$
293	,				165			-		170					175	
295	Ser	Tle	Ala	Glu	Val	Ala	Ala	Pro	Asp	Pro	Ala	Ala	Thr	Ile	Ser	Ile
296	DCI			180					185					190		
200	Cor	λen	T.vc		Pro	Glu	Ser	Val	Val	Pro	Ala	Glu	Lvs	Ala	Pro	Pro
299	261	пор	195	111u	110	01.4		200					205			
277	Cor	cor		Cor	λen	Dho	Va 1	Pro	Ser	Ala	Ser	Ala		Glv	Ser	Asp
	ser		GLY	Ser	KSII	LIIC	215	110	DOI	1114	001	220		1		
302	m1	210	C = m	7 an	wa 1	C111		Glu	T.011	Lvc	Larg		Δla	Va 1	Tle	Va1
		vaı	ser	ASP	Val		Leu	GIU	ьеu	цуз	235	Gry	AIU	VUI	110	240
305	225	-1				230	T	71.	T 011	Cor		Dro	λ 1 =	λla	Dro	
	Lys	Glu	Ата	Pro		Pro	гуѕ	Ala	Leu		PIO	PIU	Ala	AIG	255	AIU
308	_			_	245	_		Dh.	T	250	M	т1.	C1++	Dho		Clu
	Val	Gln	Gln		Leu	Trp	Asp	Phe		ьys	туг	тте	СТА		GIU	GIU
311				260			_		265	- 1	1	. 1 -	3	270	71-	C1
313	Pro	Val	Glu	Ala	Lys	Asp	Asp	Gly	Arg	Ala	Val	Ala		Asp	Ala	GIY
314			275					280				_	285		- 1	a 1
316	Ser	Phe	Glu	His	His	Gln		His	Asp	Ser	Gly		Leu	Ala	GLY	Glu
317		290					295					300			_	_
319	Asn	Val	Met	Asn	Val	Val	Val	Val	Ala	Ala		Cys	Ser	Pro	Trp	
320	305					310					315					320
322	Lys	Thr	Gly	Gly	Leu	Gly	Asp	Val	Ala	Gly	Ala	Leu	Pro	Lys	Ala	Leu
323					325					330					335	
325	Ala	Lys	Arg	Gly	His	Arg	Val	Met	Val	۷al	Val	Pro	Arg	Tyr	Gly	Asp
326		_		340					345					350		
328	Tvr	Glu	Glu	Ala	Tyr	Asp	Val	Gly	Val	Arg	Lys	Tyr	Tyr	Lys	Ala	Ala
329	-1-		355		-	-		360					365			
331	G1v	Gln		Met	Glu	Val	Asn	Tyr	Phe	His	Ala	Tyr	Ile	Asp	Gly	Val
332	GLY	370	no _P	1100	0		375					380		_	_	
331	λαη	Dho	Val	Dho	Tlo	Asn		Pro	Len	Phe	Ara		Arq	Gln	Glu	Asp
		rne	VUI	FIIC	110	390	u				395		9		_	400
222	385	(T)	C1	C1	cor		Gln	Glu	Tla	Mot		Ara	Met	Tle	Len	
	тте	тАт	ату	ату		лту	01.11	JIU	110	410		9			415	-
338	. .	T	7.1 .	77 <i>-</i>	405	C1	1/- 1	Pro	Time			Dro	Cve	G1 17		Va1
	cys	гàг	ATG		val	GIU	val	FIO	425		v a r	110	Cys	430	O-1	,
341	_	_	- 3	420	a 1		T	17- 1			λ Ι~	7.00	7 0~		uic	ጥ ኮ ኮ
343	Pro	\mathtt{Tyr}	Gly	Asp	GTA	Asn	ьeu	Val	ьие	тте	нта	ASI	ASP	ттЬ	птз	1 11T

Use of n anci/or Xaa has been detected in the Sequence Listing. Notice the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/018,418

DATE: 01/09/2002 TIME: 12:12:47

Input Set : A:\127-01.app

Output Set: N:\CRF3\01082002\J018418.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application Number

L:1910 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 L:2088 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 L:3664 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53 L:3686 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54